

## Freeform Search

<b>Database:</b>	US Pre-Grant Publication Full-Text Database
	US Patents Full-Text Database
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	IBM Technical Disclosure Bulletins
<b>Term:</b>	((HFA or HFC or hydrofluoro\$7) same (THC or tetrahydrocannabinol or marinol or drobinol))
<b>Display:</b>	20 Documents in <b>Display Format:</b> CIT Starting with Number 1
<b>Generate:</b> <input type="radio"/> Hit List <input checked="" type="radio"/> Hit Count <input type="radio"/> Side by Side <input type="radio"/> Image	

### Search History

DATE: Friday, December 29, 2006  
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<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L9</u>	((HFA or HFC or hydrofluoro\$7) same (THC or tetrahydrocannabinol or marinol or drobinol))	74	<u>L9</u>
	DB=PGPB,USPT; PLUR=YES; OP=OR		
<u>L8</u>	L7 and ((HFA or HFC or hydrofluoro\$7) same (THC or tetrahydrocannabinol or marinol or drobinol))	5	<u>L8</u>
<u>L7</u>	424/45.ccls.	2124	<u>L7</u>
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L6</u>	((Billy adj R) near2 Martin) AND @pd>20051216	1	<u>L6</u>
	DB=PGPB,USPT; PLUR=YES; OP=OR		
<u>L5</u>	(Joanne near Peart) AND @pd>20060605	0	<u>L5</u>
<u>L4</u>	((Aron adj H) near Lichtman) AND @pd>20060605	1	<u>L4</u>
<u>L3</u>	(Joanne near Peart) AND @pd>20060605	0	<u>L3</u>
<u>L2</u>	((Peter adj R) near Byron) AND @pd>20060605	3	<u>L2</u>
<u>L1</u>	(Joanne near Peart) AND @pd>20060605	0	<u>L1</u>



## Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.  
Additionally, enter the **first few letters** of the Inventor's First name.

**Last Name****First Name**

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(FILE 'HOME' ENTERED AT 21:59:47 ON 29 DEC 2006)

FILE 'CAPLUS, MEDLINE, USPATFULL' ENTERED AT 22:00:04 ON 29 DEC 2006

L1 66 S ((THC OR TETRAHYDROCANNABINOL OR MARINOL OR DROBINOL) (P) (HF  
L2 11 S L1 (P) (SOLVENT OR ETHANOL OR (ETHYL(W)ALCOHOL))  
L3 10 DUPLICATE REMOVE L2 (1 DUPLICATE REMOVED)  
L4 10 FOCUS L3 1-

=> d que l1

L1 66 SEA ((THC OR TETRAHYDROCANNABINOL OR MARINOL OR DROBINOL) (P)  
(HFA OR HFC OR HYDROFLUOROCARBON OR HYDROFLUOROALKANE))

L4 ANSWER 1 OF 10 USPATFULL on STN

TI Delta9 tetrahydrocannabinol (delta9 THC) solution metered dose inhalers and methods of use

AB The present invention provides therapeutic formulations for solutions of  $\Delta$ .sup.9-tetrahydrocannabinol ( $\Delta$ .sup.9 THC) to be delivered by metered dose inhalers. The formulations, which use non-CFC propellants, provide a stable aerosol-deliverable source of  $\Delta$ .sup.9 THC for the treatment of various medical conditions, such as: nausea and vomiting associated with chemotherapy-muscle spasticity; pain; anorexia associated with AIDS wasting syndrome, epilepsy; glaucoma; bronchial asthma; and mood disorders.

ACCESSION NUMBER: 2004:326803 USPATFULL

TITLE: Delta9 tetrahydrocannabinol (delta9 THC) solution metered dose inhalers and methods of use

INVENTOR(S): Peart, Joanne, Richmond, VA, UNITED STATES  
Byron, Peter R., Richmond, VA, UNITED STATES  
Lichtman, Aron H., Richmond, VA, UNITED STATES  
Martin, Billy R., Richmond, VA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004258622	A1	20041223
APPLICATION INFO.:	US 2004-759280	A1	20040120 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-944221, filed on 4 Sep 2001, GRANTED, Pat. No. US 6713048 Continuation-in-part of Ser. No. US 1999-273766, filed on 22 Mar 1999, GRANTED, Pat. No. US 6509005		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-105850P	19981027 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHITHAM, CURTIS & CHRISTOFFERSON, P.C., 11491 SUNSET HILLS ROAD, SUITE 340, RESTON, VA, 20190	
NUMBER OF CLAIMS:	35	
EXEMPLARY CLAIM:	CLM-01-22	
NUMBER OF DRAWINGS:	8 Drawing Page(s)	
LINE COUNT:	1344	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 2 OF 10 USPATFULL on STN

TI  $\Delta$ 9 Tetrahydrocannabinol ( $\Delta$ 9 THC) solution metered dose inhaler

AB The present invention provides therapeutic formulations for solutions of  $\Delta$ .sup.9-tetrahydrocannabinol ( $\Delta$ .sup.9 THC) to be delivered by metered dose inhalers. The formulations, which utilize non-CFC propellants, provide a stable aerosol-deliverable source of  $\Delta$ .sup.9 THC for the treatment of various medical conditions, such as: nausea and vomiting associated with chemotherapy; muscle spasticity; pain; anorexia associated with AIDS wasting syndrome; epilepsy; glaucoma; bronchial asthma; and mood disorders.

ACCESSION NUMBER: 2003:20014 USPATFULL

TITLE:  $\Delta$ 9 Tetrahydrocannabinol ( $\Delta$ 9 THC) solution metered dose inhaler

INVENTOR(S): Peart, Joanne, Richmond, VA, United States  
Byron, Peter R., Richmond, VA, United States  
Lichtman, Aron H., Richmond, VA, United States  
Martin, Billy R., Richmond, VA, United States

PATENT ASSIGNEE(S): Virginia Commonwealth University, Richmond, VA, United States (U.S. corporation)

NUMBER	KIND	DATE
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PATENT INFORMATION: US 6509005 B1 20030121  
APPLICATION INFO.: US 1999-273766 19990322 (9)

NUMBER DATE  
-----  
PRIORITY INFORMATION: US 1998-105850P 19981027 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Jones, Dameron L.  
ASSISTANT EXAMINER: Wells, Lauren Q.  
LEGAL REPRESENTATIVE: Whitham, Curtis & Christofferson, P.C., Rafa, Michael J.  
NUMBER OF CLAIMS: 12  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)  
LINE COUNT: 732  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Delta-9-tetrahydrocannabinol solution metered dose inhalers and methods of use  
AB The present invention provides therapeutic formulations for solns. of  $\Delta^9$ - tetrahydrocannabinol ( $\Delta^9$ - THC) to be delivered by metered dose inhalers. The formulations, which use non-CFC propellants, provide a stable aerosol-deliverable source of  $\Delta^9$ - THC for the treatment of various medical conditions, such as: nausea and vomiting associated with chemotherapy-muscle spasticity; pain; anorexia associated with AIDS wasting syndrome, epilepsy; glaucoma; bronchial asthma; and mood disorders. A pressurized metered dose inhaler contained  $\Delta^9$ - THC 0.13, ethanol 5, and HFA 134a 95%. The blood levels of  $\Delta^9$ - THC following aerosol exposure 20, 40, or 60 mg delivered increased in a dose dependent fashion and were comparable to the blood levels produced by i.v. injection of 3 and 10 mg/kg  $\Delta^9$ - THC. Ethanol, propanol, propylene glycol, glycerol, and polyethylene glycol.  
ACCESSION NUMBER: 2002:185600 CAPLUS  
DOCUMENT NUMBER: 136:236866  
TITLE: Delta-9-tetrahydrocannabinol solution metered dose inhalers and methods of use  
INVENTOR(S): Peart, Joanne; Byron, Peter R.; Lichtman, Aron H.; Martin, Billy R.  
PATENT ASSIGNEE(S): Virginia Commonwealth University, USA  
SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 273,766.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002031480	A1	20020314	US 2001-944221	20010904
US 6713048	B2	20040330		
US 6509005	B1	20030121	US 1999-273766	19990322
US 2004258622	A1	20041223	US 2004-759280	20040120
PRIORITY APPLN. INFO.:			US 1998-105850P	P 19981027
			US 1999-273766	A2 19990322
			US 2001-944221	A1 20010904

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI  $\Delta^9$ -tetrahydrocannabinol solution metered dose inhalers and methods of use  
AB The present invention provides therapeutic formulations for solns. of



Δ9- tetrahydrocannabinol (Δ9- THC) to be delivered by metered dose inhalers. The formulations, which utilize non-CFC propellants, provide a stable aerosol-deliverable source of Δ9- THC for the treatment of various medical conditions, such as: nausea and vomiting associated with chemotherapy; muscle spasticity; pain; anorexia associated with AIDS wasting syndrome; epilepsy; glaucoma; bronchial asthma; and mood disorders. A composition was prepared containing Δ9- THC, ethanol, and HFA 134a propellant.

ACCESSION NUMBER: 2000:290799 CAPLUS  
DOCUMENT NUMBER: 132:313709  
TITLE: Δ9-tetrahydrocannabinol solution metered dose inhalers and methods of use  
INVENTOR(S): Peart, Joanne; Byron, Peter; Lichtman, Aron; Martin, Billy  
PATENT ASSIGNEE(S): Virginia Commonwealth University, USA  
SOURCE: PCT Int. Appl., 25 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000024362	A2	20000504	WO 1999-US24486	19991020
WO 2000024362	A3	20000824		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6509005	B1	20030121	US 1999-273766	19990322
CA 2344637	A1	20000504	CA 1999-2344637	19991020
EP 1124551	A2	20010822	EP 1999-965726	19991020
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9915095	A	20020115	BR 1999-15095	19991020
JP 2002528399	T	20020903	JP 2000-577974	19991020
AU 764119	B2	20030807	AU 2000-21430	19991020
HK 1042846	A1	20060120	HK 2002-103979	20020528
PRIORITY APPLN. INFO.:				
			US 1998-105850P	P 19981027
			US 1999-273766	A 19990322
			WO 1999-US24486	W 19991020

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

TI Pharmaceutical compositions for cannabis compounds

AB The present invention relates to an improved mode of administration for cannabis and its natural and synthetic derivs. A pharmaceutical composition suitable for sublingual aerosol or spray delivery of is provided. The formulation may be dispensed using a pump spray or the formulation may include a propellant, such as butane, 1,1,1,2-tetrafluoroethane (HFC-134a) or 1,1,1,2,3,3,3-heptafluoropropane (HFC-227). The term cannabis is used herein to refer to all physiol. active substances derived from the cannabis family of plants and synthetic cannabis analogs and derivs., precursors, metabolites etc., or related substances having cannabis-like physiol. effects. For example, a composition comprising Δ9- tetrahydrocannabinol (Δ9- THC ) with HFC-134a suitable for use in a spray device can be formulated from the following ingredients: Δ9- THC 0.7%, 96% ethanol 13.2%, peppermint oil 1.4%, and HFC-134a

84.7%.

ACCESSION NUMBER: 2001:676580 CAPLUS  
DOCUMENT NUMBER: 135:231709  
TITLE: Pharmaceutical compositions for cannabis compounds  
INVENTOR(S): Ross, Calvin  
PATENT ASSIGNEE(S): GW Pharma Limited, UK  
SOURCE: PCT Int. Appl., 37 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001066089	A2	20010913	WO 2001-GB1027	20010309
WO 2001066089	A3	20020221		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2361869	A	20011107	GB 2000-5718	20000309
GB 2361869	B	20040922		
CA 2402020	A1	20010913	CA 2001-2402020	20010309
CA 2402020	C	20060829		
EP 1280515	A2	20030205	EP 2001-910026	20010309
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 200300582	A2	20030929	HU 2003-582	20010309
JP 2003533439	T	20031111	JP 2001-564742	20010309
AU 782991	B2	20050915	AU 2001-37608	20010309
HK 1041446	A1	20050513	HK 2002-103066	20020424
NO 2002004222	A	20021106	NO 2002-4222	20020904
ZA 2002007161	A	20031205	ZA 2002-7161	20020905
US 2003191180	A1	20031009	US 2003-221066	20030506
PRIORITY APPLN. INFO.:			GB 2000-5718	A 20000309
			GB 2001-1743	A 20010123
			GB 2001-1744	A 20010123
			WO 2001-GB1027	W 20010309